

Serial No.: 09/820,385

1. (Twice Amended) A substrate with a transparent conductive film, comprising a transparent substrate, and a transparent conductive film formed on a surface of said transparent substrate, wherein said transparent conductive film has a work function of 4.9 to 5.5 eV, a surface roughness of 1 to 10 nm, and a specific resistance of  $1.6 \times 10^{-4} \Omega \cdot \text{cm}$  or less,

wherein said transparent conductive film is formed on the surface of said transparent substrate by an ion plating method by using indium tin oxide which is a mixture of tin oxide and indium oxide as a material to be vaporized, wherein said indium tin oxide has a tin oxide content of 4 to 6%.

6. (Twice Amended) A method of producing a substrate with a transparent conductive film, comprising:

providing a transparent substrate; and

ion plating a transparent conductive film on a surface of said transparent substrate by using indium tin oxide which is a mixture of tin oxide and indium oxide as a material to be vaporized, wherein said indium tin oxide has a tin oxide content of 4 to 6%,

wherein the transparent conductive film has a work function of 4.9 to 5.5 eV, a surface roughness of 1 to 10 nm and a specific resistance of  $1.6 \times 10^{-4} \text{ A} \cdot \text{cm}$  or less.